ZWARTE ZEE

Profile & Decks

'ZWARTE ZEE'

GEN. BOX No 1218

003712-003719-0272

SECTION SHOWING FRAMING BRIDGESIDE.
BRIDGE DECK
MAIN DECK.
L 3½"×2½"×.28 SPACED .30
L 4¾"×3"×.36 AT EVERY FRAME
4"×2½"×.32 AT EVERY FRAME
11"×11"×.32
⅝" RIVETS.
18"×.36.
3½" P.P.
3"×3"×.36
3"×3"×.30
33"×.30 FOR ½L
20"×.30 AT ENDS
3½"×2½"×.32
3" P.P
2½"×2½"×.30
10"×.32
4"×3"×.32
SKYLIGHT.
FUNNEL
.24 STEEL DECK.
DECK 2½" P.P.
DECK 3" P.P.
ENTRANCE
GALLEY
COVERED WITH CEMENT
W.C. COVERED WITH CEMENT
VENTILATOR
L. Smit & Zn.
L. SMIT & ZOON
KINDERDIJK
HOLLAND
PLATING .26
STIFFENERS 3½×2½×.28 SPACED 30"
FENDER
BATHROOM
OFFICERS
FREEING PORT 28"×18"
CREW
STORE
TANK
RESERVE OIL FUEL
TUNNEL
OIL FUEL TANK AT SB AND PORT. SHAFT TUNNEL IN CENTRE
BOTTOM OF TUNNEL .34
O.T. CENTRETHROUGH PLATE .42
DECKSTRINGERPLATE DECK .32
MOTOR ROOM
OIL TANK
WATERTANK
OIL TANK IN CENTRE OF VESSEL
COFFERDAM
FRESHWATERTANK
RUNNERSPACE
CHAINLOCKER
SIDESTRINGER
BRACKET
FLOORS .36
½L
¼L
BEAMS L 4"×2½"×.32
SHEERSTRAKE THICK .36
DOUBLING 18"×.40
STRONG KNEE
HATCH
SHAFT TUNNEL
BULKHEAD PLATING .26 COAMINGS AT TOP AND BOTTOM .28 STIFFENERS 3×2½×.26
W.C. COVERED WITH CEMENT
Curtain plate .34 on 58 frame
Back bar carried down over waterway bar or waterway bar made 6" deep
Bkt on 47 frame

LONGITUDINAL SECTION
OF A STEEL MOTOR SCREW TUG.

LLOYD'S CLASS ✠.100. A.1. "FOR TOWING SERVICES."

DIMENSIONS:

LENGTH B.P.P.	60.10 M = 197.18 FT
BREADTH MLD	9.76 " = 32.02 "
DEPTH "	5.90 " = 19.36 "

SCALE 1:50.

1ST N = L × D = 197.18 × 19.36 = 3817.
2ND LN = L (B+D) = 197.18 (32.02 + 19.36) = 10131.
L/D 197.18 : 19.36 = 10.19.
B : 32.02
D = 19.36

LATEST
PLAN
Profile & DK

SCHIP № 872.
CALQUE № 4668.
BL: DRUK №

16.12.32

003712-003719-0272
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~~SS~~/MS "ZWARTE ZEE"

TO ACCOMPANY Rot. Rpt. No 46402

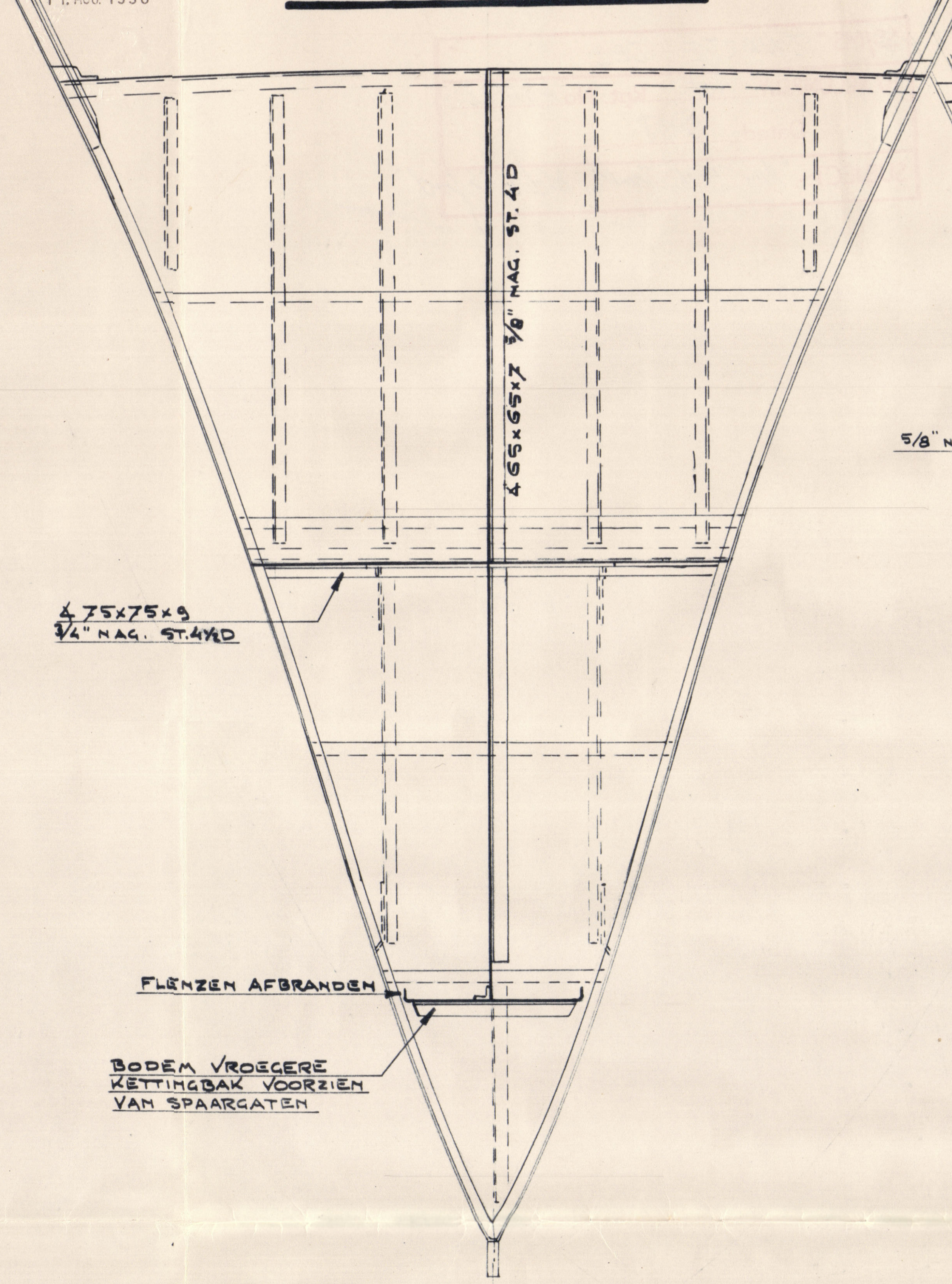
Dated 10.58

SUBJECT:- "New F.W. Tank, Bhd Akford"

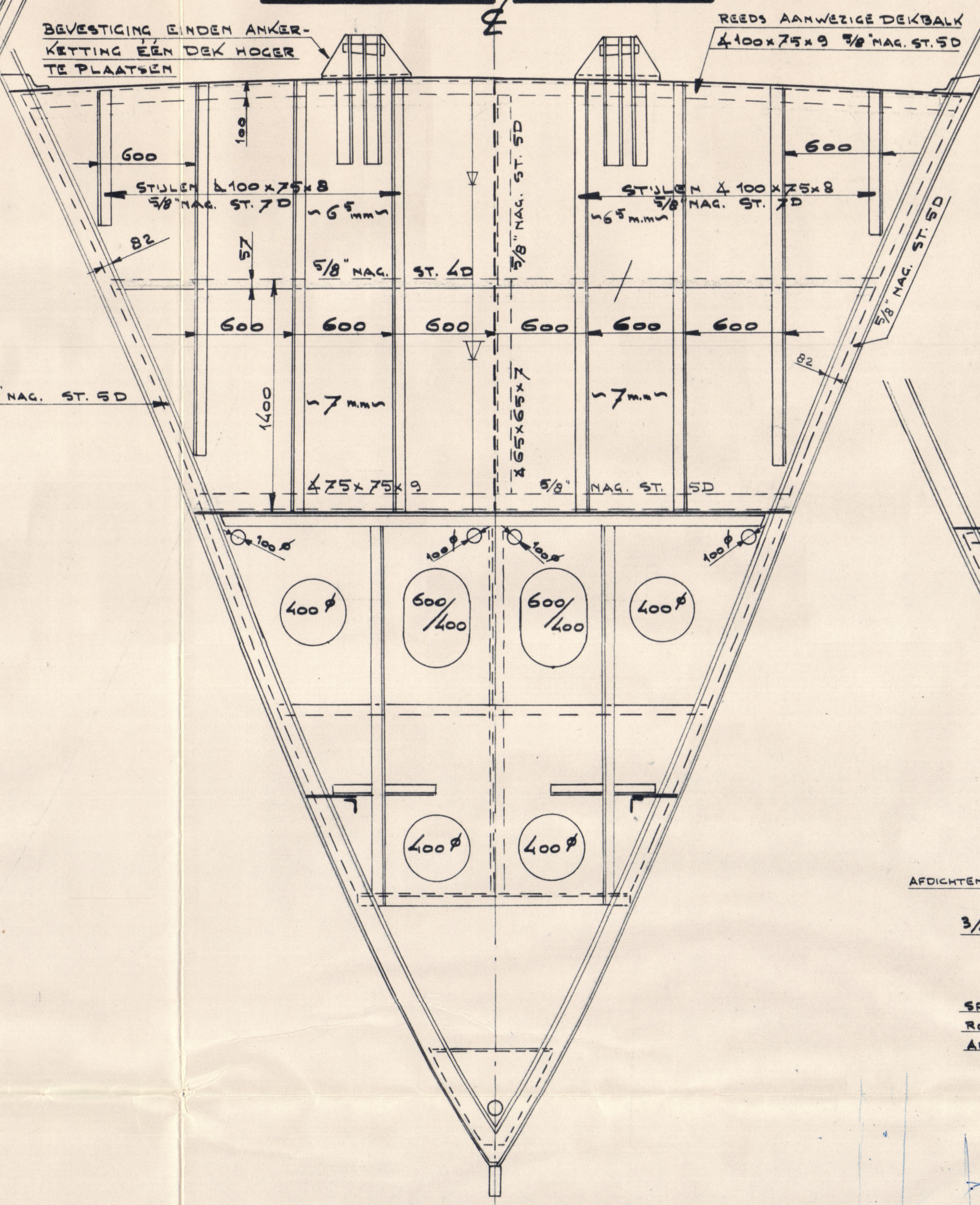
0037 12-003719-0253

11 AUG. 1958

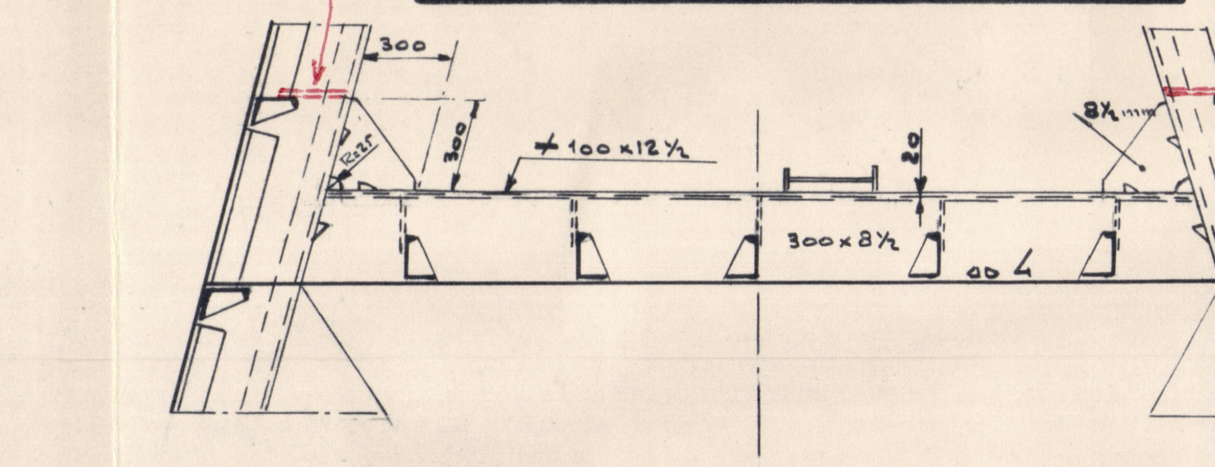
SCHOT SPT 9


∠65×65×7 5/8" NAG. ST. 4D
∠75×75×9
3/4" NAG. ST. 4½D
FLENZEN AFBRANDEN
BODEM VROEGERE KETTINGBAK VOORZIEN VAN SPAARGATEN

SCHOT SPT 12

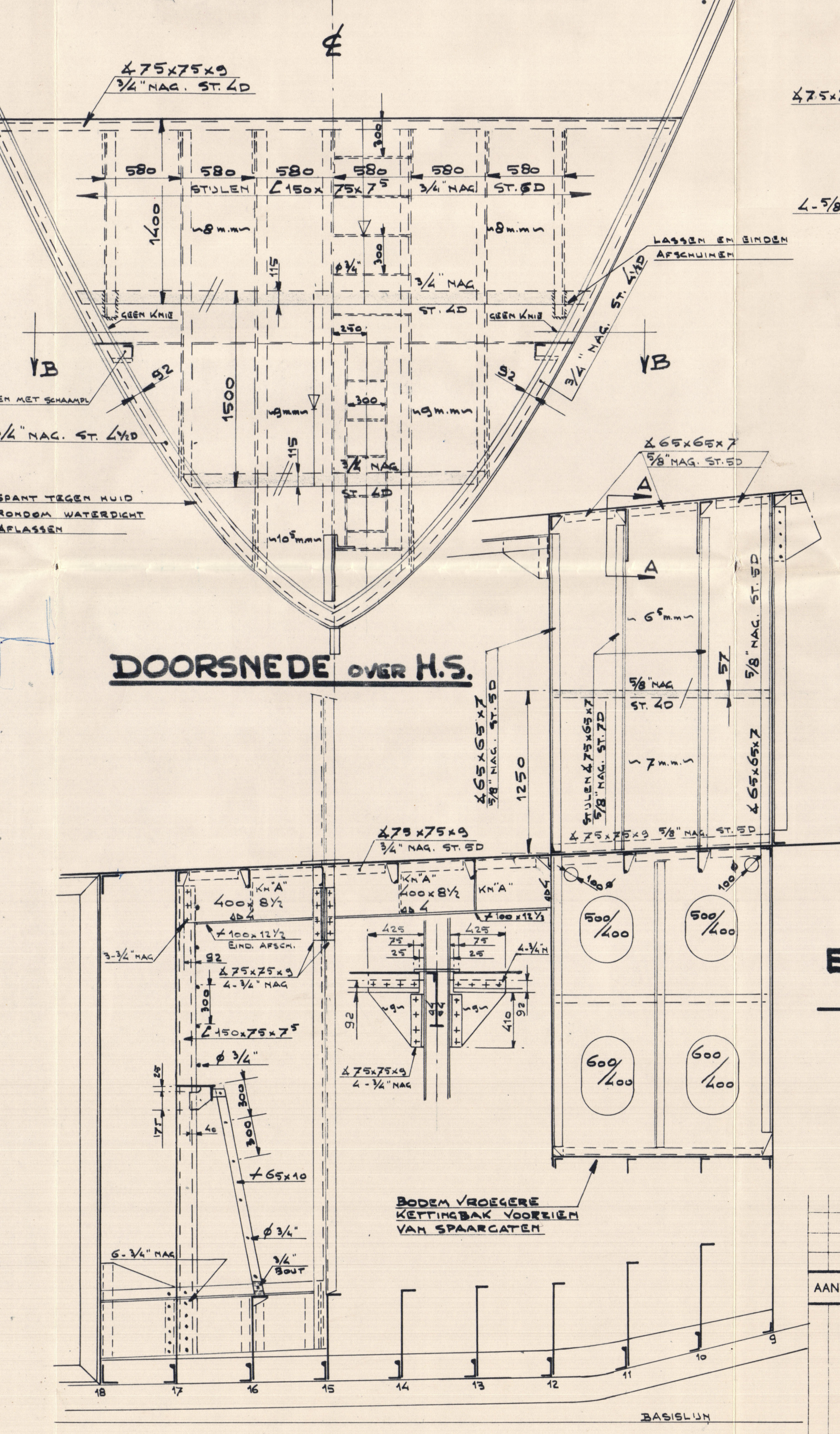

BEVESTIGING EINDEN ANKERKETTING EEN DEK HOGER TE PLAATSEN
REEDS AANWEZIGE DEKBALK ∠100×75×9 5/8" NAG. ST. 5D
600
STIJLEN ∠100×75×8 5/8" NAG. ST. 7D
~6½ m.m.
82
5/8" NAG. ST. 4D
600 600 600 600 600 600
1400
~7 m.m.
5/8" NAG. ST. 5D
∠75×75×9
∠65×65×7
100ø
400ø
600/400
400ø

DOORSNEDE B-B

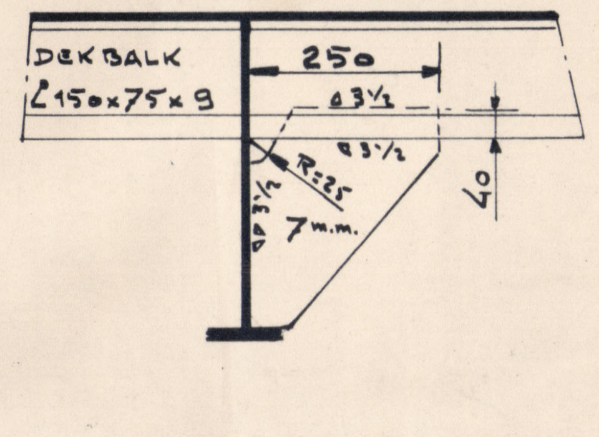

Bkb
300
∠100×12½
300×8½
8½

SCHOT SPT 17

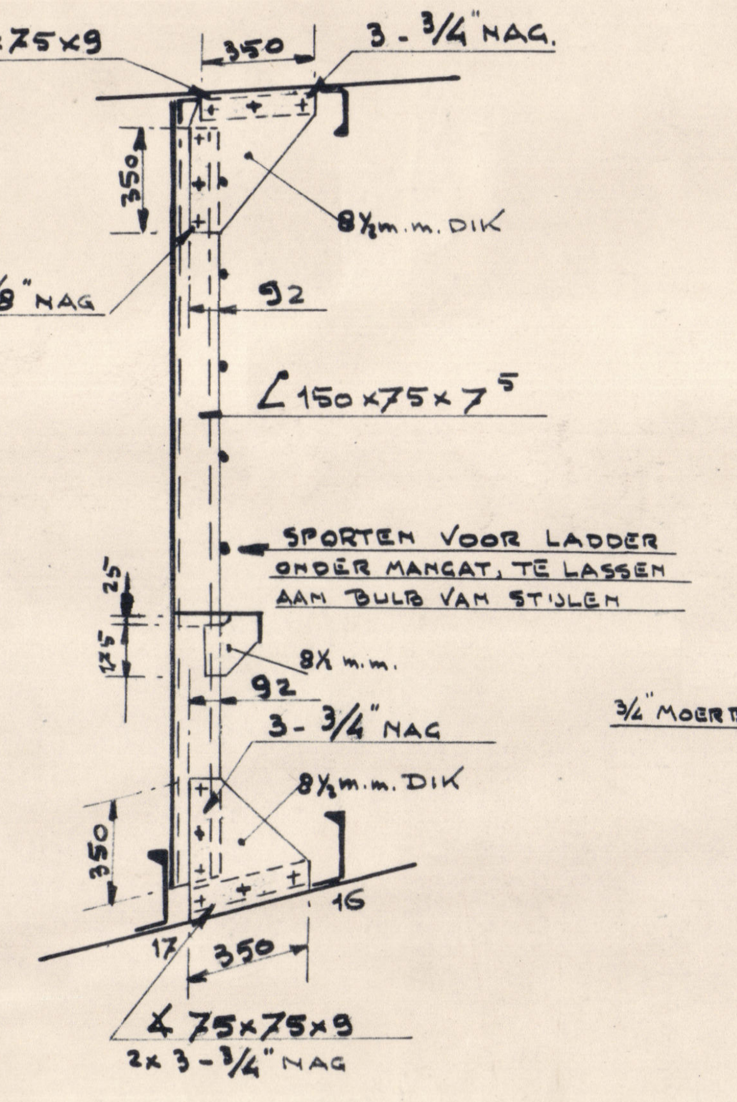
DOORSNEDE over H.S.


∠75×75×9
3/4" NAG. ST. 4D
580 580 580 580 580 580
STIJLEN ∠150×75×7⁵ 3/4" NAG. ST. 6D
1400
~8 m.m.
3/4" NAG
ST. 4D
LASSEN EN EINDEN AFSCHUINEN
GEEN KNIE
B
92
1500
~9 m.m.
AFDICHTEN MET SCHAAMP.
3/4" NAG. ST. 4½D
SPANT TEGEN HUID RONDOM WATERDICHT AFLASSEN
~10 m.m.
∠65×65×7
5/8" NAG. ST. 5D
A
~6⁵ m.m.
5/8" NAG ST. 4D
~7 m.m.
1250
STIJLEN ∠75×65×7 5/8" NAG. ST. 7D
∠75×75×9 5/8" NAG. ST. 5D
∠75×75×9 3/4" NAG. ST. 5D
400×8½
∠100×12½ EIND. AFSCH.
KN "A"
∠150×75×7⁵
∠75×75×9 4-3/4" NAG
ø 3/4"
∠65×10
3/4" BOUT
6-3/4" NAG
500/400
600/400
BODEM VROEGERE KETTINGBAK VOORZIEN VAN SPAARGATEN
BASISLIJN
18 17 16 15 14 13 12 11 10 9

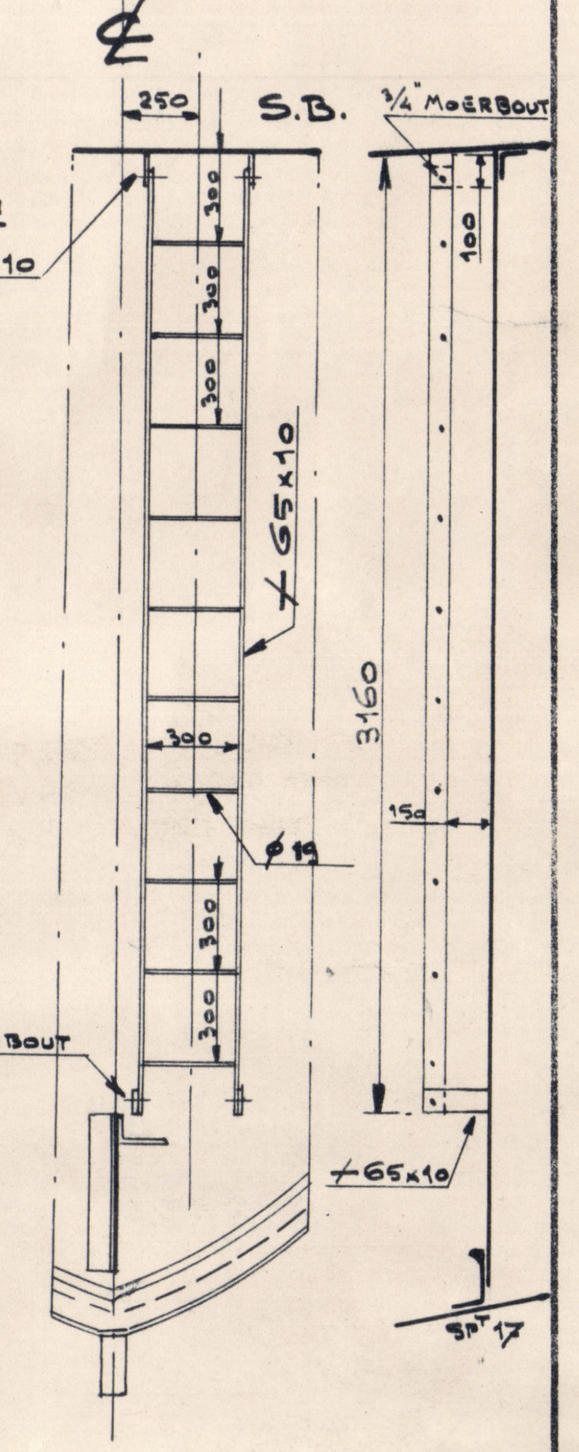
KNIE "A"


DEKBALK ∠150×75×9
250
ø3½
7 m.m.
40

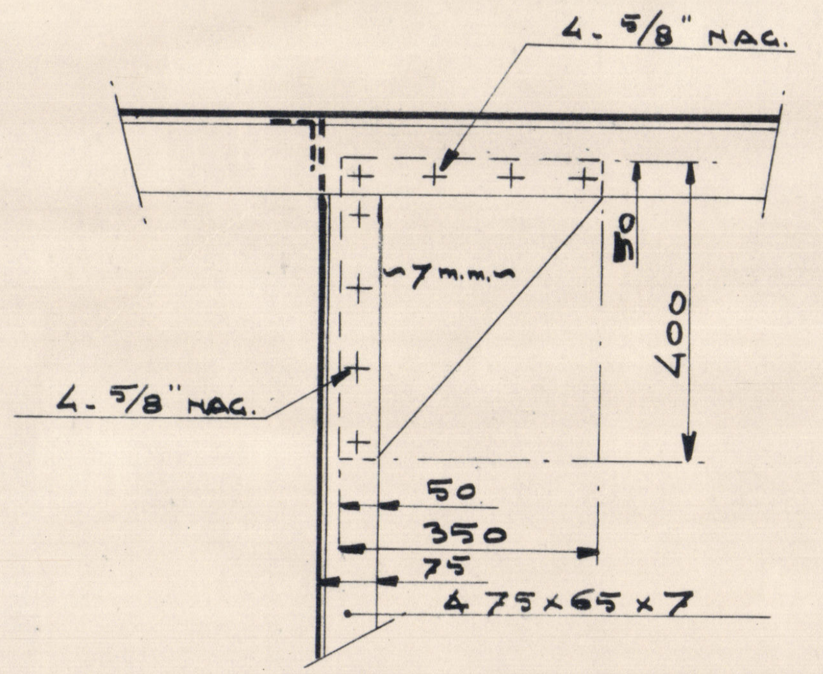
DOORSNEDE SCHOTSTIJLEN SPT 17

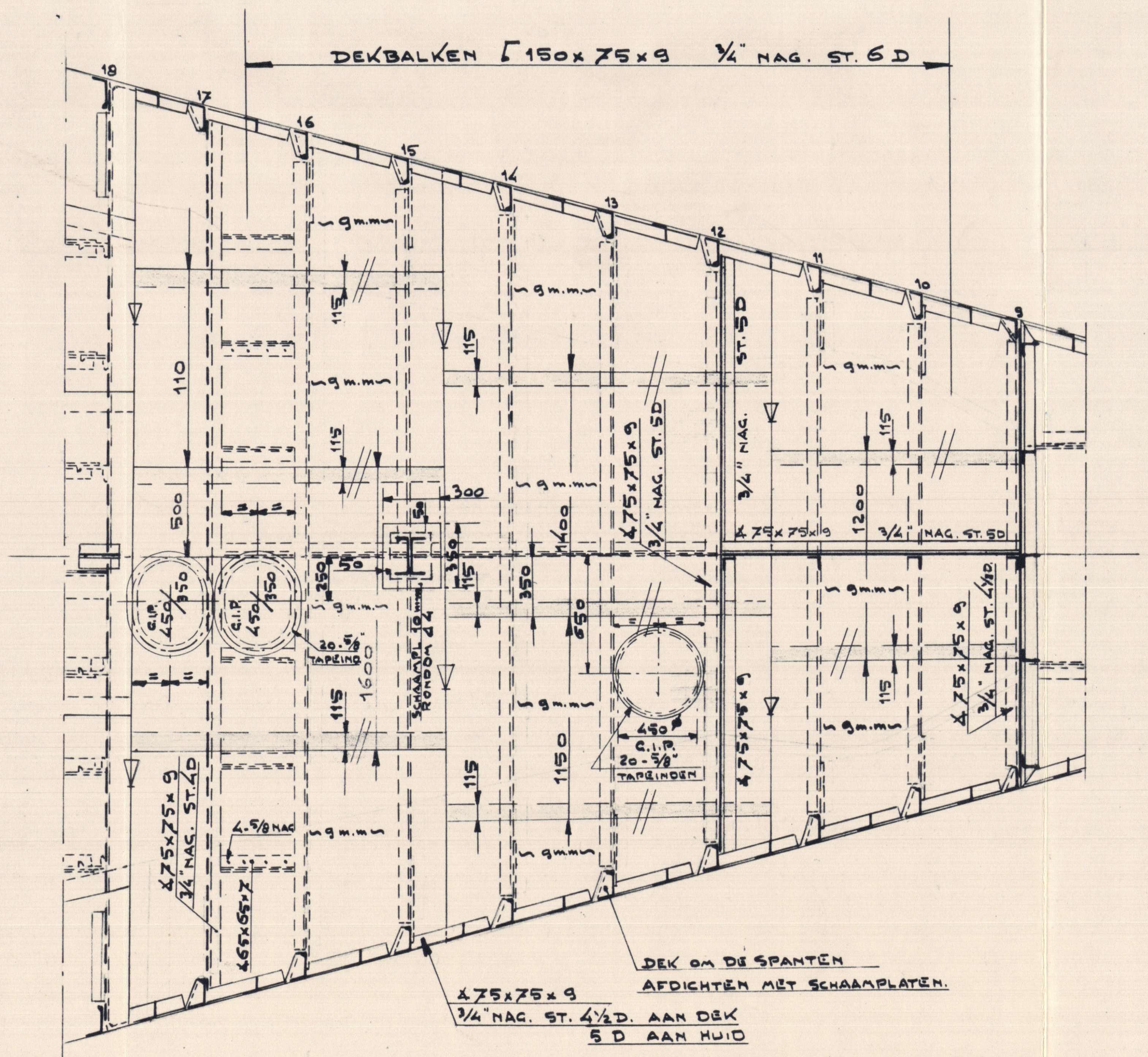

∠75×75×9
350
3-3/4" NAG.
250
8½ m.m. DIK
4-5/8" NAG
92
∠150×75×7⁵
SPORTEN VOOR LADDER ONDER MANGAT, TE LASSEN AAN BULB VAN STIJLEN
9½ m.m.
3-3/4" NAG
8½ m.m. DIK
350
∠75×75×9
2×3-3/4" NAG

LADDER IN COFFERDAM

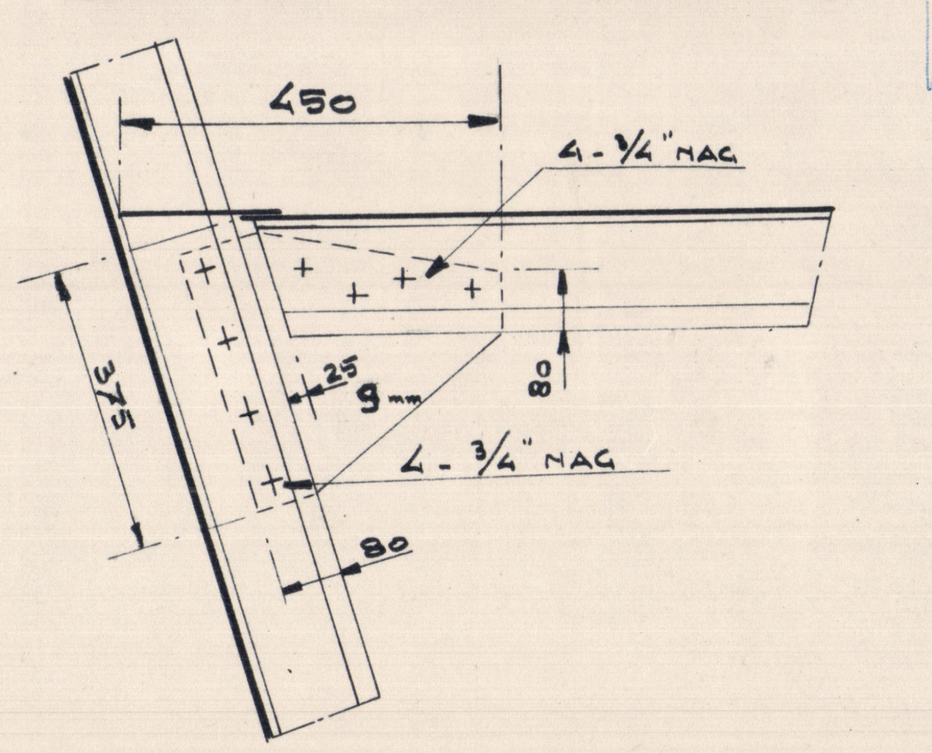

S.B.
250
3/4" MOERBOUT
∠65×10
3160
ø19
SPT 17

DOORSN. A-A

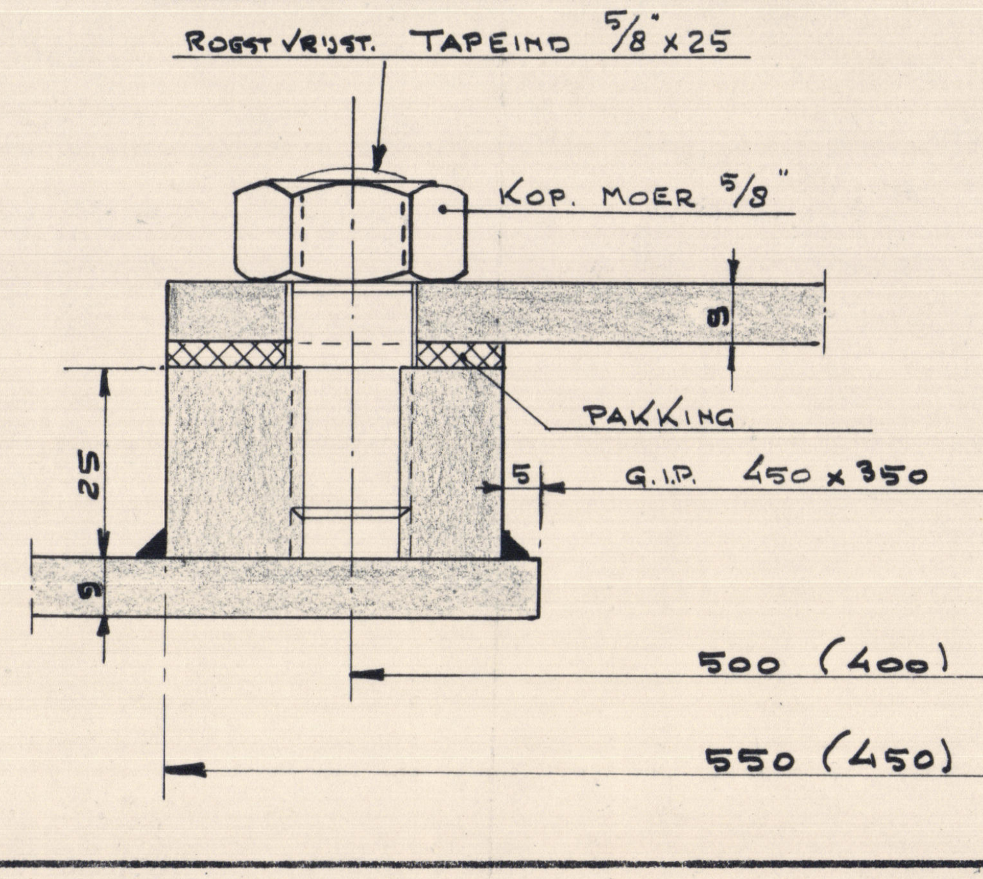

4-5/8" NAG.
~7 m.m.
400
4-5/8" NAG.
50
350
75
∠75×65×7


DEKBALKEN ∠150×75×9 3/4" NAG. ST. 6D
19 18 17 16 15 14 13 12 11 10
~9 m.m.
G.I.P. 450/350
20-5/8" TAPEIND
1600
1150
∠75×75×9 3/4" NAG. ST. 5D
∠65×65×7
DEK OM DE SPANTEN AFDICHTEN MET SCHAAMPLATEN.
∠75×75×9
3/4" NAG. ST. 4½D. AAN DEK
5D AAN HUID

DETAIL DEKBALKKNIE


450
4-3/4" NAG
375
25
9 m.m.
80
4-3/4" NAG
80

DETAIL MANGAT


ROEST VRIJST. TAPEIND 5/8×25
KOP. MOER 5/8"
9
PAKKING
G.I.P. 450×350
25
9
500 (400)
550 (450)

E.E.A. IN OVERLEG MET TOEZICHT

BELONGS TO ROTTERDAM REPORT No: 46402

GEKEURD EN GEWIJZIGD VOLGENS "LLOYD'S" D.D. 6 AUG. '58

SURVEYORS' COPY

11/8/58

AANTAL	STUK No.	BENAMING	MAT.	LEVERANCIER	OPMERKINGEN

M.S. "ZWARTE ZEE"
BESTEMMING AANT. 1 UITV.
DATUM 5 AUG. '58

L. SMIT & Co's INTERNATIONALE SLEEPDIENST
HOOFDKANTOOR: ROTTERDAM
TECHNISCHE DIENST: MAASSLUIS

DRINKWATERTANK VOORSCHIP SPT 9-17

SCHAAL 1:25, 1:10, 1:1	DATUM	ZIE OOK TEKENING	
GETEKEND A.J. DE VRIES	4 AUG '58	TEKENING No	C-180
GECALQUEERD A.J. DE VRIES	4 AUG '58	RANGSCHIK No	
GEZIEN			

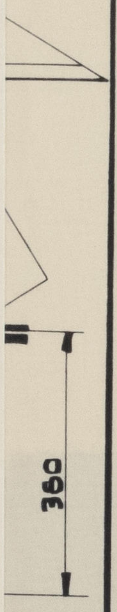
003712-003719-0253

~~SS~~/MS " ZWARTE ZEE "

TO ACCOMPANY Rot Rpt. No 46402

Dated 10 58

SUBJECT:- "Addtl. W.T. Bhd. fr. 81. to construct C/D. for New F.W. Tank"



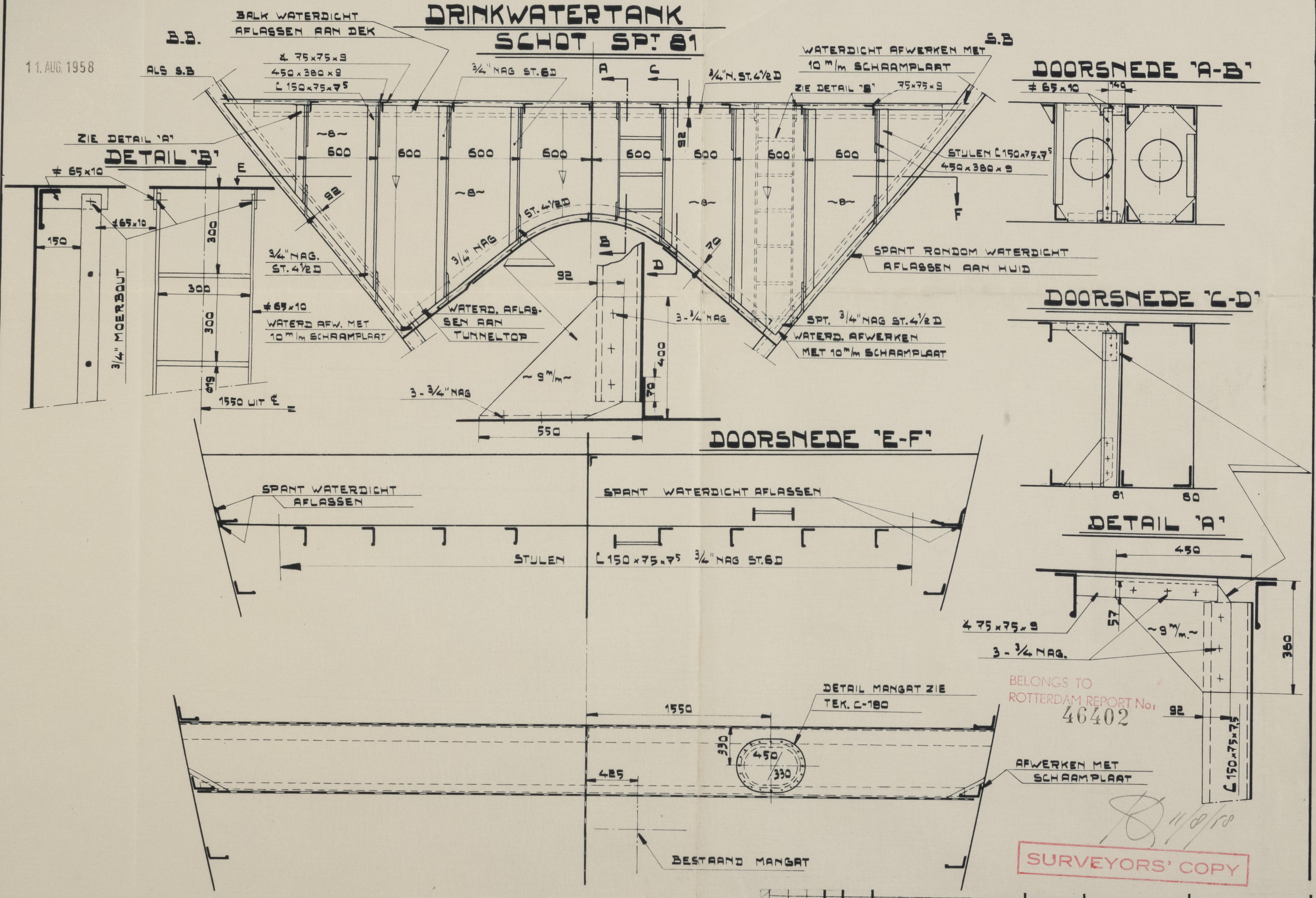
IGEN

NST

31

11 AUG. 1958

DRINKWATERTANK
SCHOT SPT 81


B.B.
S.B
ALS S.B
BALK WATERDICHT AFLASSEN AAN DEK
∠ 75x75x9
450x380x9
∟150x75x7,5
3/4" NAG ST.6D
A
C
3/4" N. ST. 4 1/2 D
WATERDICHT AFWERKEN MET 10 m/m SCHAAMPLAAT
ZIE DETAIL 'B'
75x75x9
ZIE DETAIL 'A'
~8~
600
92
STULEN ∟150x75x7,5
450x380x9
F
ST. 4 1/2 D
3/4" NAG
3/4" NAG. ST. 4 1/2 D
B
D
70
SPANT RONDOM WATERDICHT AFLASSEN AAN HUID
WATERD. AFW. MET 10 m/m SCHAAMPLAAT
WATERD. AFLASSEN AAN TUNNELTOP
SPT. 3/4" NAG ST. 4 1/2 D
WATERD. AFWERKEN MET 10 m/m SCHAAMPLAAT
3-3/4" NAG
400
~9 m/m~
550
DETAIL 'B'
E
≠65x10
150
300
3/4" MOERBOUT
Ø19
1550 UIT ℄
DOORSNEDE 'A-B'
140
DOORSNEDE 'C-D'
81
80
DETAIL 'A'
450
57
380
∠ 75x75x9
3-3/4 NAG.
~9 m/m~
92
∟150x75x7,5
DOORSNEDE 'E-F'
SPANT WATERDICHT AFLASSEN
SPANT WATERDICHT AFLASSEN
STULEN ∟150x75x7,5 3/4" NAG ST.6D
DETAIL MANGAT ZIE TEK. C-180
1550
330
450
425
AFWERKEN MET SCHAAMPLAAT
BESTAAND MANGAT

BELONGS TO
ROTTERDAM REPORT No. 46402

11/8/58

SURVEYORS' COPY

E.E.A. IN OVERLEG MET TOEZICHT

GEKEURD EN GEWIJZIGD VOLGENS "LLOYD'S" D.D. 6 AUG. '58.

AANTAL	STUK No.	BENAMING	MAT.	LEVERANCIER	OPMERKINGEN

AANT. 1 UITV.

L. SMIT & Co's INTERNATIONALE SLEEPDIENST
HOOFDKANTOOR: ROTTERDAM
TECHNISCHE DIENST: MAASSLUIS

"ZWARTE ZEE"
W.D. SCHOT SPT 81

BESTEMMING		DATUM		
SCHAAL 1:10, 25		DATUM	ZIE OOK TEKENING	C-180
GETEKEND	Sp	5-8-'58	TEKENING No	B-291
GECALQUEERD	Sp	5-8-'58	RANGSCHIK No	
GEZIEN				

W.T. Bulkhead Fr 81

003712-003719-0252

NN IERSE ZEE

EX ZWARTE ZEE III - 62

EX "ZWARTE ZEE" - 61

L Smit & Zoon
872

Machy Section

GEN. ~~BOX No 1218~~

003712-003719-0276

Ship Rules

605/3 .20.17

—MIDSHIP SECTION—
OF A STEEL MOTOR SCREW TUG.
LLOYD'S CLASS ✠ 100.A.1 "FOR TOWING SERVICES".

EQUIPMENT:

3 STOCKLESS BOWER ANCHORS 20 1/6 CWT.

1 STREAM ANCHOR (INCL. STOCK) 7 3/16 " ✓ 5.75 / 1.44 / 7.19

210 FATHOMS 1 3/8" STUDLINK CHAIN. ✓

1 STREAM WIRE	60 FATHOMS	STEEL WIRE		3 1/4"	✓
1 TOWLINE	90	"	"	3"	
1 HAWSER	90	"	"	2 1/4"	✓
1 WARP	90	"	"	1 3/4"	✓

DIMENSIONS:

LENGTH B.P.P.	60,10 M =	197,18 FT.
BREADTH MLD	9,76 " =	32,02 "
DEPTH "	5,90 " =	19,36 "

SCALE 1:25.

1ST LN = L×D = 197,18 × 19,36 = 3817.

2ND LN = L(B+D) = 197,18 (32,02 + 19,36) = 10131.

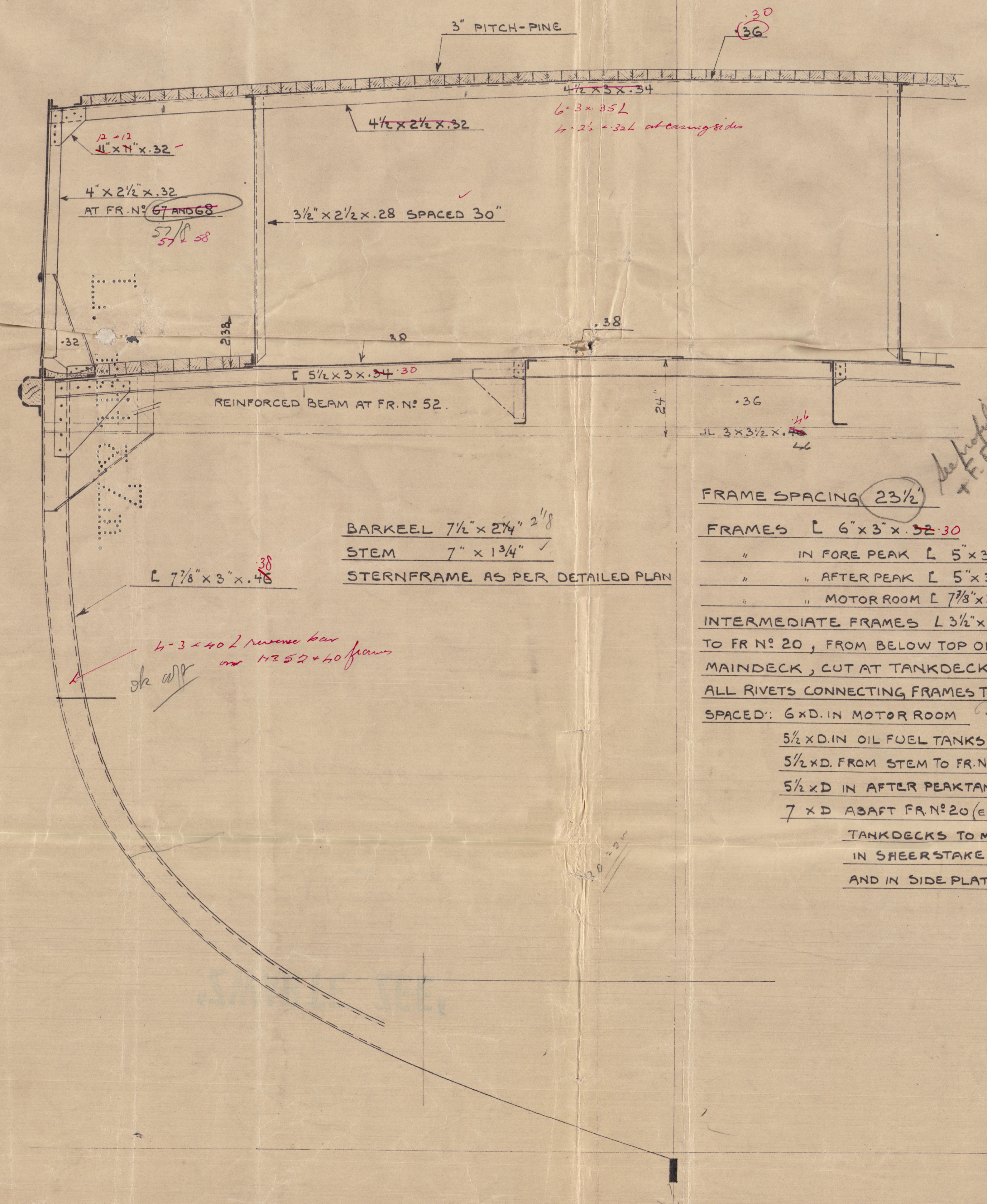
$\frac{L}{D}$ = 197,18 : 19,36 = 10,19.

B = 32,02.

D = 19,36.

EQUIPMENT NUMBER = 2ND LN = 10131.

SECTION AT FR. NO 58.


3" PITCH-PINE
~~.36~~ .30
4 1/2 × 3 × .34
6·3×·35 L
4·2 1/2·×·32 L at casing sides
~~4 1/2 × 2 1/2 × .32~~
~~11" × 11"~~ × .32 12×12
4" × 2 1/2" × .32 AT FR. NO ~~67 AND 68~~ 57/8 57 + 58
3 1/2" × 2 1/2 × .28 SPACED 30"
.32
2 38
38
.38
[5 1/2 × 3 × ~~.34~~ .30
REINFORCED BEAM AT FR. NO 52.
24"
.36
JL 3 × 3 1/2 × ~~.40~~ .46 46
L 7 7/8" × 3" × ~~.46~~ .38
4·3×40 L reverse bar on FR 52+40 frames
ok aff

BARKEEL 7 1/2" × 2 1/4" 2 1/8

STEM 7" × 1 3/4" ✓

STERNFRAME AS PER DETAILED PLAN

See profile + F.E. 23"

FRAME SPACING 23 1/2"

FRAMES [6" × 3" × ~~.32~~ .30

" IN FORE PEAK [5" × 3" × .32 ✓

" " AFTER PEAK [5" × 3" × .32 ✓

" " MOTOR ROOM [7 7/8" × 3" × ~~.46~~ .38

Upper tween deck frames where main frames cut at 2nd deck may be 6·3×·36 L

INTERMEDIATE FRAMES L 3 1/2" × 3" × .40 FROM STEM TO FR NO 20, FROM BELOW TOP OF FLOORS TO MAINDECK, CUT AT TANKDECK AND STRINGERS. X

ALL RIVETS CONNECTING FRAMES TO SHELL 3/4" RIV.

SPACED: 6×D. IN MOTOR ROOM

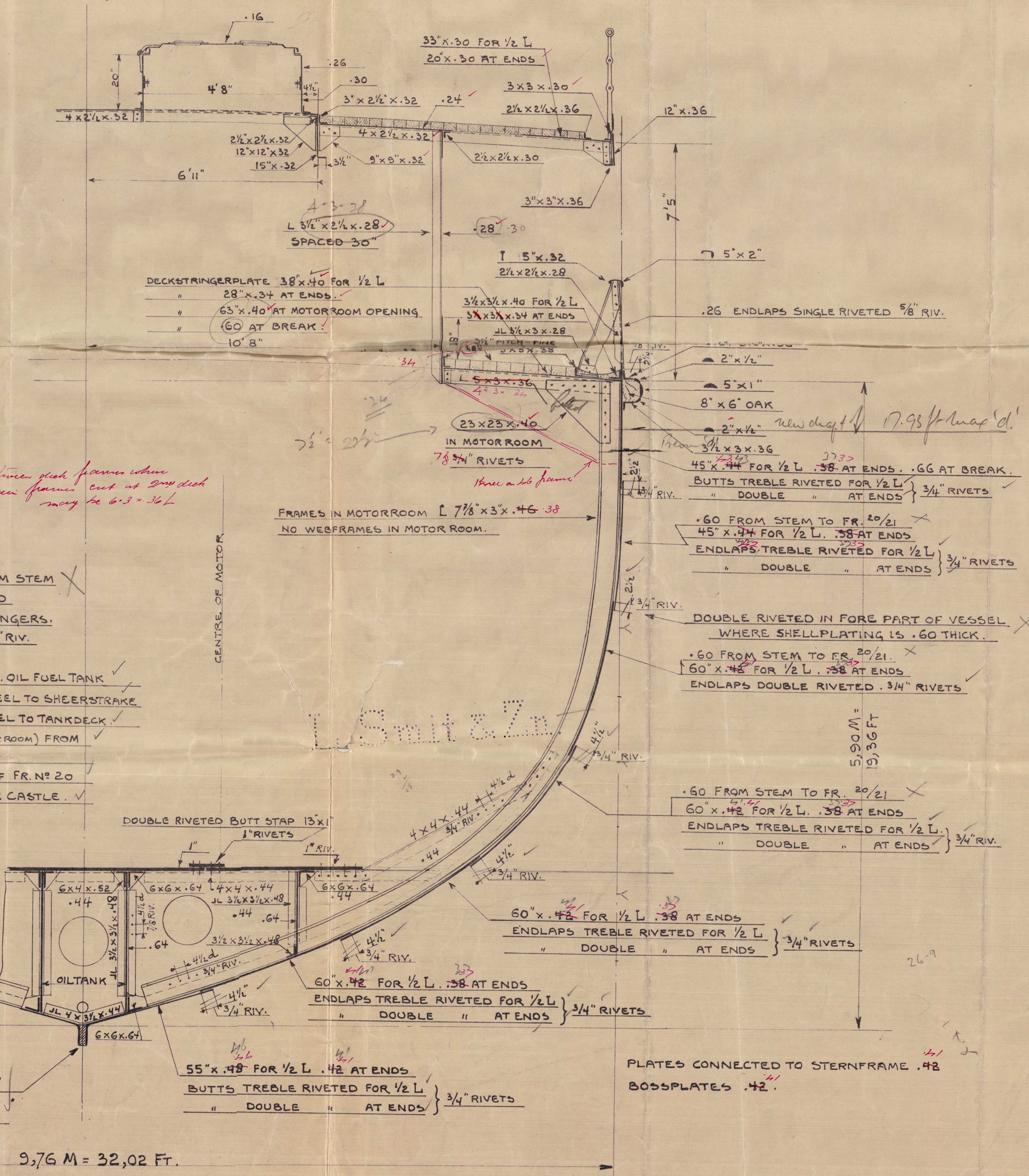
5 1/2 ×D. IN OIL FUEL TANKS AND IN RES. OIL FUEL TANK ✓

5 1/2 ×D. FROM STEM TO FR. NO 20, FROM KEEL TO SHEERSTRAKE ✓

5 1/2 ×D IN AFTER PEAKTANK, FROM KEEL TO TANKDECK. ✓

7 ×D ABAFT FR. NO 20 (EXCEPT IN MOTOR ROOM) FROM TANKDECKS TO MAINDECK, IN SHEERSTAKE FORWARD OF FR. NO 20 AND IN SIDE PLATING OF FORE CASTLE. ✓

MIDSHIP SECTION (FR. NO 50)


.16
20"
4'8"
.26
4 1/2"
.30
3" × 2 1/2" × .32
.24
4 × 2 1/2 × .32
4 × 2 1/2 × .32
2 1/2" × 2 1/2 × .32
12" × 12" × 32
15" × .32
3 1/2"
9" × 9" × .32
2 1/2 × 2 1/2 × .30
6'11"
33" × .30 FOR 1/2 L
20" × .30 AT ENDS
3 × 3 × .30
2 1/2 × 2 1/2 × .36
12" × .36
3" × 3" × .36
7'5"
4·3·28
L 3 1/2" × 2 1/2 × .28
~~SPACED 30"~~
.28 .30
I 5" × .32
2 1/2 × 2 1/2 × .28
⌐ 5" × 2"
3 1/2 × 3 1/2 × .40 FOR 1/2 L
~~3 1/2 × 3 1/2~~ × .34 AT ENDS
JL 3 1/2 × 3 × .28
3 1/2" PITCH-PINE
3 × 3 × .38
18"
.34
L ~~5 × 3 × .36~~ 4·3×·34
fitted
.26 ENDLAPS SINGLE RIVETED 5/8" RIV.
2" × 1/2"
5" × 1"
8" × 6" OAK
2" × 1/2"
3 1/2 × 3 × .36
new draft 17.93 ft max 'd'
23 × 23 × .40 IN MOTORROOM
7/8 ~~3/4~~" RIVETS
Knee on 46 frame
2 1/2"
3/4" RIV.
3/4" RIV.
4 1/2"
3/4" RIV.
4 1/2 d
4 × 4 × .44
3/4" RIV.
.44
4 1/2"
3/4" RIV.
5,90 M = 19,36 FT
CENTRE OF MOTOR
6 × 4 × .52
.44
6 × 6 × .64
4 × 4 × .44
JL 3 1/2 × 3 1/2 × .48
.44
.64
6 × 6 × .64
.44
JL 3 1/2 × 3 1/2 × .48
4 1/2 d
7/8 RIV.
.64
3 1/2 × 3 1/2 × .48
OILTANK
JL 4 × 3 1/2 × .44
6 × 6 × .64
4 1/2 d
3/4" RIV.
4 1/2"
3/4" RIV.
4 1/2"
3/4" RIV.
1"
1" RIV.
L. Smit & Zn.
9,76 M = 32,02 FT.

DECKSTRINGERPLATE 38" × .40 FOR 1/2 L ✓

" 28" × .34 AT ENDS. ✓

" 63" × .40 ✓ AT MOTORROOM OPENING

" .60 AT BREAK. ✓

10'8"

FRAMES IN MOTORROOM [7 7/8" × 3" × ~~.46~~ .38

NO WEBFRAMES IN MOTOR ROOM.

45" × ~~.44~~ .43 FOR 1/2 L ~~.38~~ .37 AT ENDS. .66 AT BREAK.

BUTTS TREBLE RIVETED FOR 1/2 L } 3/4" RIVETS ✓
" DOUBLE " AT ENDS }

.60 FROM STEM TO FR. 20/21 X

45" × ~~.44~~ .43 FOR 1/2 L. ~~.38~~ .37 AT ENDS

ENDLAPS TREBLE RIVETED FOR 1/2 L } 3/4" RIVETS ✓
" DOUBLE " AT ENDS }

DOUBLE RIVETED IN FORE PART OF VESSEL WHERE SHELLPLATING IS .60 THICK. X

.60 FROM STEM TO FR. 20/21. X

60" × ~~.42~~ .41 FOR 1/2 L. ~~.38~~ .37 AT ENDS

ENDLAPS DOUBLE RIVETED. 3/4" RIVETS ✓

.60 FROM STEM TO FR. 20/21 X

60" × ~~.42~~ .41 FOR 1/2 L. ~~.38~~ .37 AT ENDS

ENDLAPS TREBLE RIVETED FOR 1/2 L. } 3/4" RIV.
" DOUBLE " AT ENDS }

DOUBLE RIVETED BUTT STAP 13" × 1"

1" RIVETS

60" × ~~.42~~ .41 FOR 1/2 L. ~~.38~~ .37 AT ENDS

ENDLAPS TREBLE RIVETED FOR 1/2 L } 3/4" RIVETS
" DOUBLE " AT ENDS }

60" × ~~.42~~ .41 FOR 1/2 L. ~~.38~~ .37 AT ENDS

ENDLAPS TREBLE RIVETED FOR 1/2 L } 3/4" RIVETS
" DOUBLE " AT ENDS }

55" × ~~.48~~ .46 FOR 1/2 L. ~~.42~~ .41 AT ENDS

BUTTS TREBLE RIVETED FOR 1/2 L } 3/4" RIVETS
" DOUBLE " AT ENDS }

BARKEEL 7 1/2" × 2 1/4"

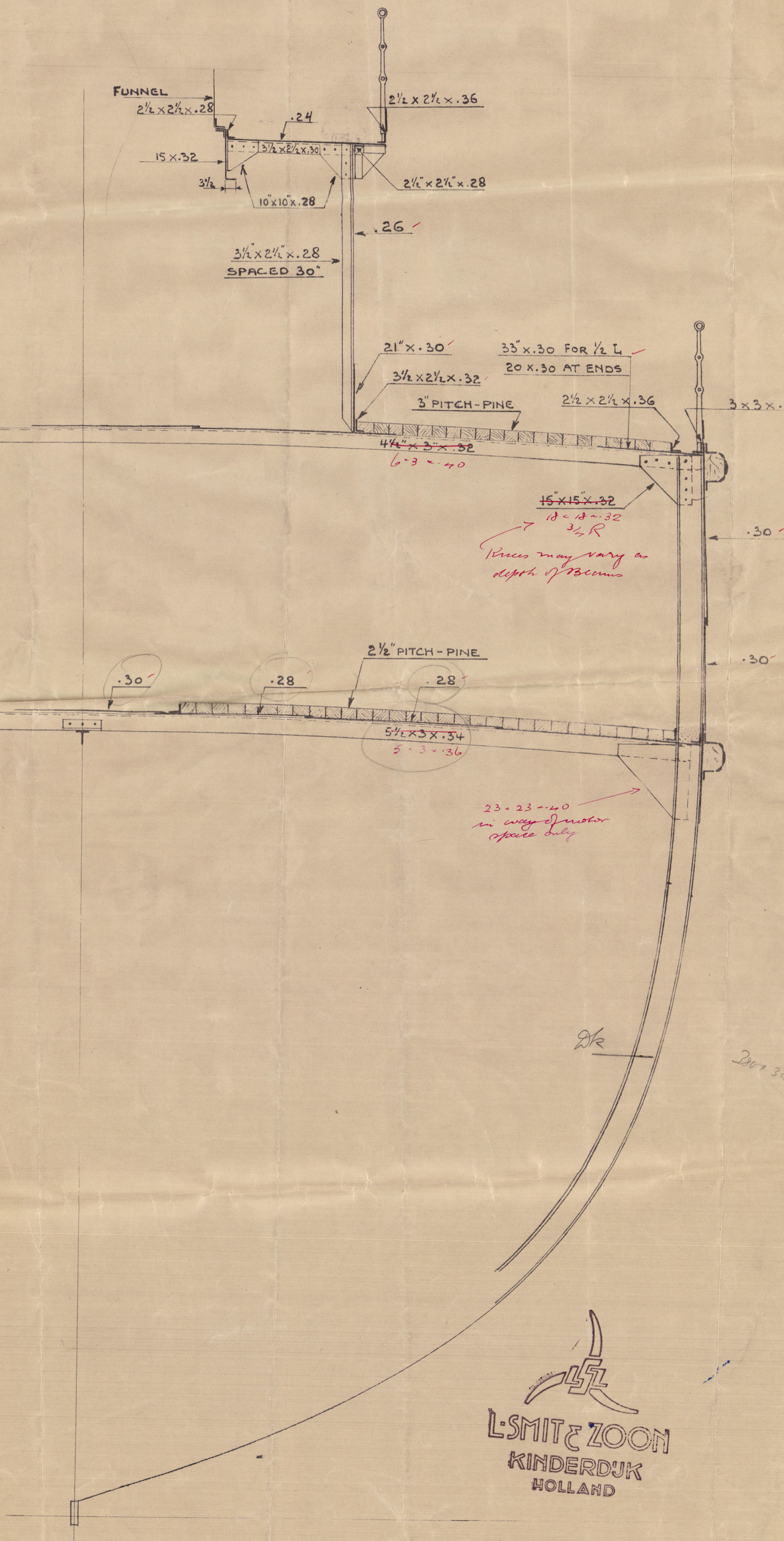
1" RIVETS

SCARPHS 20 1/4" LONG

PLATES CONNECTED TO STERNFRAME ~~.42~~ .41

BOSSPLATES ~~.42~~ .41.

SECTION AT FR. NO 36.


FUNNEL
2 1/2 × 2 1/2 × .28
.24
15 × .32
3 1/2 × 2 1/2 × .30
3 1/2
10" × 10" × .28
2 1/2 × 2 1/2 × .36
2 1/2" × 2 1/2" × .28
.26
3 1/2" × 2 1/2" × .28
SPACED 30"
21" × .30
3 1/2 × 2 1/2 × .32
33" × .30 FOR 1/2 L
20 × .30 AT ENDS
3" PITCH-PINE
2 1/2 × 2 1/2 × .36
3 × 3 × .30
~~4 1/2" × 3" × .32~~
6·3×·40
~~15" × 15" × .32~~
18×18×·32
3 1/2 R
Knees may vary as depth of Beams
.30
2 1/2" PITCH-PINE
.30
.28
.28
.30
5 1/2 × 3 × .34
5·3×·36
23×23×·40 in way of motor space only
Dk

L·SMIT & ZOON
KINDERDIJK
HOLLAND

SCHIP NO 872.

CALQUE NO 4652.

BL: DRUK NO

7.10.32

24.9.28.

003712-003719-0276

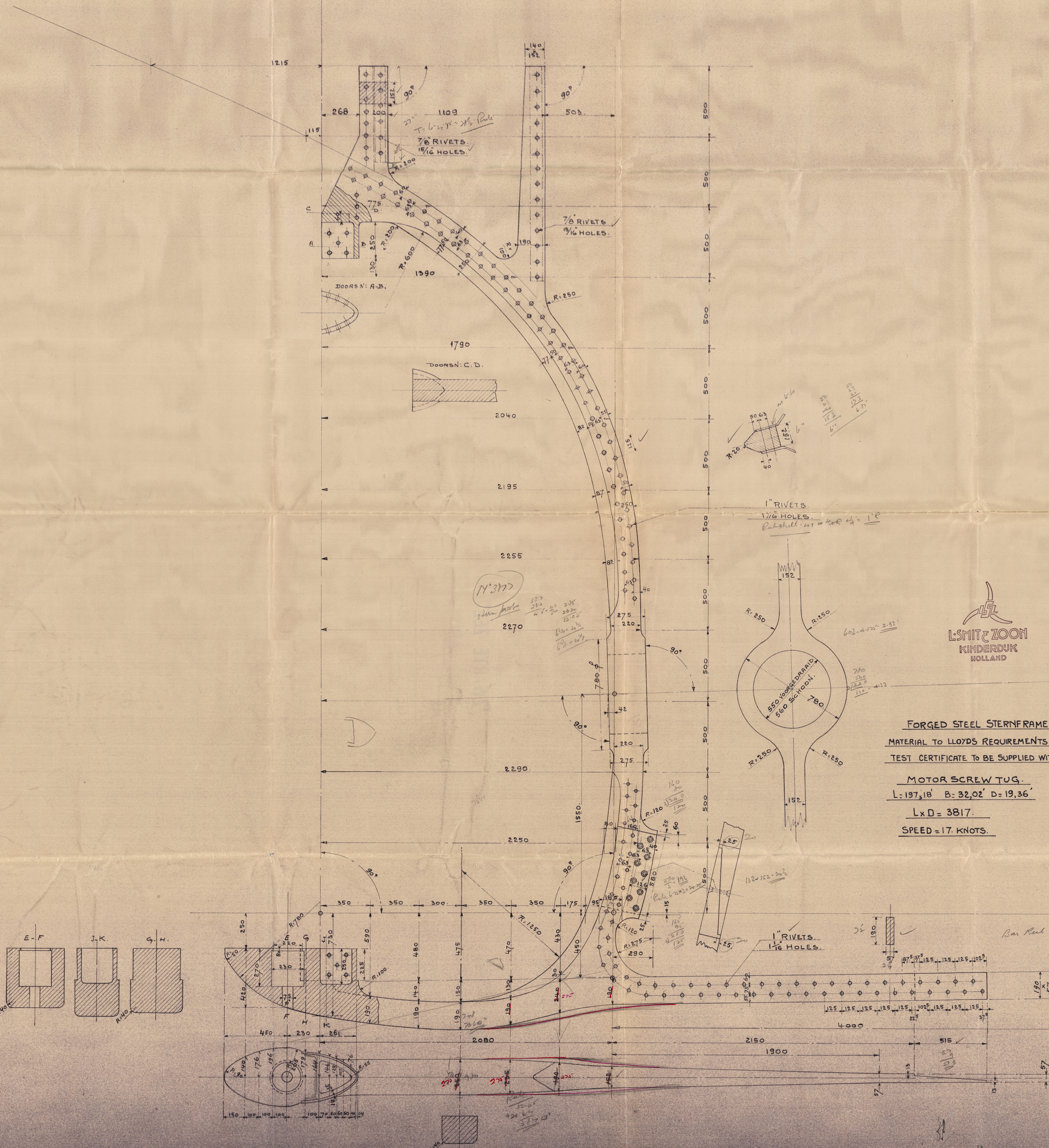
'ZWARTE ZEE'

Sternfrau

GEN. BOX No 1218

003712-003719-0274

Offred


1215
268
1109
503
115
140
152
90°
200
152
27"
T=6·2½"=28½" Plate
7/8" RIVETS.
15/16" HOLES.
R=200
775
C
D
A
B
60
250
130
R=200
R=600
1390
190
R=100
R=250
DOORSN: A-B.
1790
DOORSN: C.D.
2040
2195
2255
2270
2290
2250
1" RIVETS
1 1/16 HOLES.
No 3773
550 VOORGEDRAAID
560 SCHOON
780
152
R=250
780
1550
275
220
42
R=120
R=1250
R=275
R=780
R=100
290
350
300
175
430
450
480
475
470
590
230
330
250
420
270
140
190
450
230
261
2080
2150
1900
4000
515
125
102.5
87.5
37.5
22.5
190 x 57
57
13
1668.8
387.3
90°
E-F
J.K.
G.H.
R=40
R=55
150
100
Bar Reel 7½ x 2¼

L. SMIT & ZOON
KINDERDIJK
HOLLAND

FORGED STEEL STERNFRAME.

MATERIAL TO LLOYDS REQUIREMENTS

TEST CERTIFICATE TO BE SUPPLIED WITH.

MOTOR SCREW TUG.

L=197,18' B=32,02' D=19,36'

LxD=3817.

SPEED=17 KNOTS.

No 872

ACHTERSTEVEN.

SCHAAL. 1:10.

G.1 _ H.2.

4670.

Rudder carrier

'ZWARTE ZEE'

GEN. ~~BOX No 1218~~

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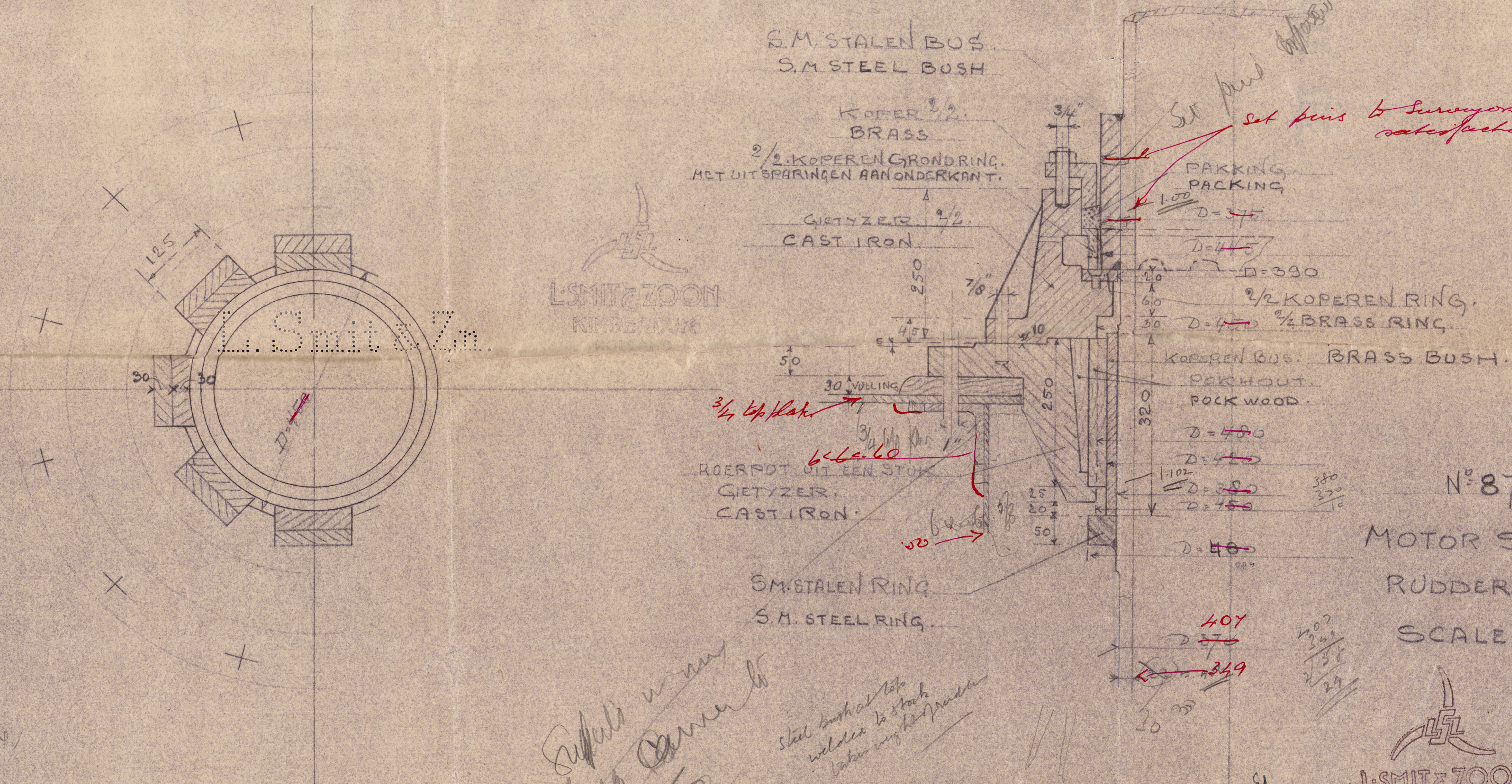
Lloyd's Register Foundation

Office


L. Smit & Zn.
125
30
30
D=
S.M. STALEN BUS.
S.M STEEL BUSH
KOPER 2/2.
BRASS
2/2. KOPEREN GRONDRING.
MET UITSPARINGEN AAN ONDERKANT.
GIETYZER. 2/2
CAST IRON
3/4"
7/8"
250
45
5
10
50
30 VULLING
3/4 top plate
3/4 top plate
1"
6 × 6 × .60
ROERPOT UIT EEN STUK
GIETYZER.
CAST IRON.
.50
3/8
25
20
50
250
S.M. STALEN RING
S.M. STEEL RING.
Set pins to Surveyors satisfaction
1.00
PAKKING
PACKING
D=~~375~~
D=~~445~~
D=390
20
60
30
2/2 KOPEREN RING.
D=~~450~~ 2/2 BRASS RING.
KOPEREN BUS. BRASS BUSH.
POKHOUT.
POCKWOOD.
320
D=~~480~~
D=~~420~~
1.102
D=~~380~~
D=~~450~~
380
370
10
D=~~40~~
407
D ~~375~~
349
407
349
58
2
29
370

Steel bush at top welded to stock taking weight of rudder

No 872

MOTOR SCREW TUG.

RUDDER CARRIER.

SCALE 1:5.

L. SMIT & ZOON
KINDERDIJK
HOLLAND

4672.

14. 12 37

-12-32

Rudder

For Stock

See letter 16/1/33

~~GEN. BOX No 1218~~

'ZWARTE ZEE'

003712-003719-0273

DECK LINE
407
312
L. Smit & Zn.
6,25 M. = 20'-6½"
ELECTR: WELDED.
L. SMIT & ZOON KINDERDIJK HOLLAND
7/8" ~~3/4~~ BOLTS.
DOP MET LOODWIT.
PITCH PINE
Riveted
No 30
Rivets to S. Satisfaction
at bottom if practicable
370 UITW
14 m/m.
275
1082
728
LASSCHEN
welded at each intercostal
WELDED.
RUDDER PLATE 16 m/m
INTERCOSTALE.
ELECTR: WELDED ALL ROUND.
WELDED ALL ROUND
1400
4'7"
180
WELDED
16 m/m
18 m/m
75×75×10
LASSCHEN
No 30
14 m/m.
12 m/m

No 872

MOTOR SCREW TUG.

RUDDER

SCALE 1:10.

welding notation

2

14. 12. 32

4671

003712-003719-0273